

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 16-30 are currently pending in this application. Independent claims 16, 20, 24, 28, and 30 have been amended to better distinguish the features of present invention. Applicants submit that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §103

Claims 16-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0196808 to Chaskar et al. (hereinafter "Chaskar") in view of U.S. Patent No. 5,907,542 to Kuehnel et al. (hereinafter "Kuehnel").

Independent claim 16 of the present application is directed to a method for handoff of a wireless terminal which loses its connection to a first access point associated with a first access router to a second access point associated with a second access router. Responsive to the loss of connection with the first access point, the wireless terminal transmits a reassociation message to the second access point. A reassociation success message is transmitted back to the wireless terminal from the second access point, and an inter-access router handoff procedure is started.

The inter-access router handoff procedure comprises the wireless terminal providing the second access point information regarding the first access router, which the second access point then provides to the second access router. The second access router contacts the first access router, which then in turn reroutes traffic destined for the wireless terminal to the second access router. Finally, the inter-access router handover is completed by the second access router reestablishing a communication session with the wireless terminal by way of the second access

point. The remaining independent method claims 20 and 24, and wireless transmit/receive unit (WTRU) claims 28 and 30 recite similar features as described above with respect to claim 16.

In contrast, Chaskar discloses a method wherein a first access router contains a “selector function” that determines a second access router for a mobile terminal when said terminal moves away from a service area serviced by the first access router. (See Chaskar, paragraph [0027].) Independent claim 16 of the present application recites:

the terminal, responsive to the loss of a connection with the first AP, scanning for another connection, selecting the second AP, retrieving information from the second AP, determining that the second AP is different from the first AP;

the terminal transmitting a reassociation message to the second AP;

...the terminal, after the receipt of the reassociation success message, initiating a handoff procedure

Whereas Chaskar discloses a method wherein a first access point determines which new access point a mobile unit will connect to, claim 16 as amended recites a method wherein the mobile terminal determines which new access router to connect to.

As the Office Action notes, Chaskar does not disclose the subject matter of “the second AP sending to the terminal a re-association success message....” The office action cites Kuehnel for teaching, “that it is known to provide the second AP sending to the terminal a re-association success message.” In pages 7-8 of the Office Action, the Examiner details the motivation for combining Chaskar and Kuehnel stating, “it provides more efficiency for the system...[to provide] the identity of the second AP,” it would have been obvious for one skilled in the art to provide the identity of the second AP in a re-association message in light of the Kuehnel disclosure. The Applicant respectfully submits that there is no motivation to

combine the teaching of Kuehnel with the teaching of Chaskar because Kuehnel explicitly teaches away from providing the identity of a second AP in any handover message. Kuehnel discloses as follows:

The above [handover] procedure makes it unnecessary to include the new access point identifier in the mobile terminal's Handover Requests.... Otherwise, the mobile terminal...would have to obtain the identifier of the new access point AP and include it in the Handover Request message. (See Kuehnel, Col. 7, Lines 27-29, emphasis added.)

Kuehnel discloses a method that explicitly teaches away from transmitting information regarding the identity of a second access point until after the handover process is complete. Kuehnel does not provide motivation to include the identity of a second access point in a handover request message because Kuehnel discloses a method wherein the mobile unit *does not* know the identity of an access point prior to a handover request, and therefore the identity cannot be included in a request message. Therefore, because Kuehnel fails to teach or remotely suggest that a mobile unit obtains the identifier of a new access point, Kuehnel does not provide motivation for sending an access point identifier in a reassociation message, as claimed in each independent claim of the present application.

Kuehnel discloses a method wherein the identity of the new access point to which the mobile station is being handed over to is not known by the mobile station prior to receiving a handover confirmation message. (See Kuehnel, Col. 6, lines 60-62.) Because Kuehnel specifically teaches away from the present invention by disclosing a method wherein the identity of a second access point is *not* used in a handover request, it would *not* have been obvious for one skilled in the art to use the identity of a second access point in a reassociation message, as claimed.

Moreover, although Kuehnel discloses a method that uses a confirmation message, the discussion of the confirmation message is in the context of an initial registration process. Kuehnel specifically defines registration in the context of

when, "a mobile terminal enters a coverage area (radio cell) of an access point AP, or a new mobile terminal is switched "ON." (See Kuehnel, Col. 5, Lines 4-6.) Kuehnel does not discuss the subject matter of confirmation message in the context of a handover procedure.

Lastly, Kuehnel is further distinguishable from the present invention in that Kuehnel discloses a method wherein a *new* message is sent after the handover protocol has been performed to determine which access point the mobile terminal is now attached to. Kuehnel teaches, "After the handover protocol has been performed, the mobile terminal sends a 'hello' message. This message allows the control function to determine which access point the mobile terminal is now attached to." (See Kuehnel Col. 7, Lines 9-12). Independent claim 16 recites a method wherein a reassociation message that includes the identity of a second access point is sent *before* the mobile terminal is authenticated and authorized by the second access point, (i.e., *before* the handover process is complete.) (See present application, paragraph [0021], and Steps S6 and S7 of Figure 1A.)

For the reasons stated above, Applicant respectfully submits that independent claim 16 is patentable over the cited prior art. Applicant furthermore submits that independent claims 20 and 24 are also distinguishable from the cited prior art for the reasons presented above. Claims 17-19, 21-23, and 25-29, which depend from claims 16, 20, and 24, respectively, are also believed to be patentable over the cited prior art for the reasons presented above.

With respect to independent claim 30, independent claim 30 recites a wireless transmit/receive unit (WTRU) comprising:

a processor configured to detect the loss of a connection from a first AP in a first ESS, to scan for a new AP, to select a new AP, and to generate a reassociation message including information concerning a first AR associated with the first AP and first ESS; (Emphasis added.)

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The Applicant submits that claim 30 differs from Chaskar, which discloses that a first access point selects a new access point for a mobile unit. The Applicants further submits that claim 30 differs from Kuehnel, which teaches that the identity of the new access point is disclosed *after* the completion of a handoff procedure, rather than *prior* to the completion of the handoff, as discussed above.

Based on the arguments presented above, withdrawal of the 35 U.S.C. §103(a) rejection of claims 16-30 is respectfully requested.

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Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 16-30, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,
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